

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A display substrate accommodating tray, comprising:

a bottom section supports a display substrate on at least a portion of a planar top surface of the bottom section, wherein the portion of the planar top surface supporting the display substrate has a surface area that is at least the majority of the surface area of the bottom surface of the display substrate;

a frame provided along a periphery of the bottom section, the frame projecting to a level higher than a level of the top surface of the bottom section; and

a flange-like engaging section, protruding externally from walls of said frame in a substantially horizontal fashion such that a horizontal gap extending to the outer periphery of the display substrate accommodating tray is provided below the flange-like engaging section, to be engaged by a carrying section moving from outside the periphery horizontally into the horizontal gap for carrying the display substrate accommodating tray;

wherein a planar top surface of the frame and a wall defining an inner periphery of the flange-like engaging section define a positional relationship between the display substrate accommodating tray and another display substrate accommodating tray which is to be stacked thereon,

wherein the planar top surface of said frame is parallel to the planar top surface of the bottom section having the display substrate and the wall of the flange-like engaging section is connected to said planar surface of said frame,

wherein the wall of the flange-like engaging section projects to a level higher than the level of the planar top surface of the frame with respect to the surface of the bottom section,

and

the width of the frame is substantially larger than the distance between the top of the top surface of the frame and the top surface of the bottom section.

2. (Canceled).

3. (Canceled).

4. (Canceled).

5. (Original) A display substrate accommodating tray according to claim 1, wherein the bottom section and the frame are integrally formed from a synthetic resin foam material.

6. (Previously Presented) An apparatus for removing a display substrate from a display substrate accommodating tray, the display substrate accommodating tray including:

a bottom section adapted to mount a display substrate thereon in a substantially horizontal fashion, with a plurality of openings being formed in the bottom section,

a frame for surrounding at least a part of the display substrate when the display substrate is mounted on the bottom section, and

an engaging section extending from a side surface of the frame,

the apparatus comprising:

a plurality of first supporting members adapted to , while the display substrate is mounted on the bottom section, raise the display substrate above the bottom section; and

a second supporting member for supporting the display substrate accommodating tray while the display substrate is being raised above the accommodating tray,

wherein the plurality of first supporting members are adapted to raise the display substrate by being inserted into the plurality of openings respectively and penetrating through the bottom section and moving the display substrate upward from the display substrate accommodating tray, and

wherein the second supporting member is adapted to move upwards or downwards.

7. (Original) An apparatus according to claim 6, wherein the plurality of first supporting members are inserted into the plurality of openings vertically.

8. (Previously Presented) A method for removing a display substrate from a display substrate accommodating tray, the display substrate accommodating tray including:

a bottom section for mounting the display substrate thereon in a substantially horizontal fashion, with a plurality of openings being formed in the bottom section,

a frame for surrounding at least a part of the display substrate when the display substrate is mounted on the bottom section, and

an engaging section, extending from a side surface of said frame, to be engaged by a carrying mechanism for carrying the display substrate accommodating tray having the display substrate mounted thereon;

the method comprising the steps of:

while the display substrate is mounted on the bottom section, engaging the display substrate accommodating tray at the engaging section by said carrying mechanism from above the accommodating tray, and positioning the openings of the bottom section to be coincident with a position of a plurality of supporting members and positioning the rest of the bottom section to be coincident with a position of a second supporting member, said second supporting member adapted to be pushed downwards by said accommodating tray when said accommodating tray is placed thereupon, and said second supporting member adapted to move upwards when said accommodating tray is being removed;

placing said tray onto said second supporting member, so that said plurality of supporting members move upward relative to the display substrate accommodating tray, thereby inserting the plurality of supporting members into the plurality of openings respectively; and

raising the display substrate above the bottom section by penetrating the plurality of supporting members through the accommodating tray.

9. (Currently Amended) A display substrate accommodating tray, comprising:

a bottom section supports a display substrate on at least a portion of a planar top surface of the bottom section, wherein the portion of the planar top surface supporting the display substrate is at least the area of the majority of the bottom surface area of the display substrate;

a frame for surrounding at least a part of the display substrate when the display substrate is mounted on the bottom section; and

a flange-like engaging section, protruding externally from walls of the frame in a substantially horizontal fashion such that a horizontal gap extending to the outer periphery of the display substrate accommodating tray is provided below the flange-like engaging section, to be engaged by a carrying section moving from outside the periphery horizontally into the horizontal gap for carrying the display substrate accommodating tray;

wherein a planar top surface of the frame and a wall defining an inner periphery of the flange-like engaging section define a positional relationship between the display substrate accommodating tray and another display substrate accommodating tray which is to be stacked thereon,

wherein the planar top surface of said frame is parallel to the planar top surface of the bottom section having the display substrate and the wall of the flange-like engaging section is connected to said planar surface of said frame, wherein the wall of the flange-like engaging section projects to a level higher than the level of the planar top surface of the frame with respect to the surface of the bottom section,

a plurality of openings are formed in the bottom section,
the frame projects to a level higher than a level of a top surface of the bottom section, and
the width of the frame is substantially larger than the distance between the top surface of the frame and the top surface of the bottom section.

10. (Canceled).

11. (Canceled).

12. (Previously Presented) A display substrate accommodating tray according to claim 9, wherein the bottom section and the frame are integrally formed from a synthetic resin foam material.

13. (Previously Presented) An apparatus according to claim 6, wherein an engaging section extends from a side surface of the frame.

14. (Canceled).

15. (Canceled).

16. (Previously Presented) An apparatus according to claim 6, wherein the second supporting member is supported by at least one of a spring, a ball screw or an air cylinder, so as to allow the second supporting member to move upwards or downwards.

17. (Previously Presented) An apparatus according to claim 6, wherein each of the first supporting members is a rod having a top portion which is larger than a remaining portion of the rod.

18. (Previously Presented) An apparatus according to claim 6, wherein each of the first supporting members has a roller provided at a top end thereof.